

Geo. W. Diener Mfg. Co.



Gasoline Torches and Furnaces



**400-420 North Monticello Avenue
Chicago, Ill., U. S. A.**

TORRID LINE TORCHES AND FURNACES

(None better made, without apologies)

"Torrid" Blow Torches and Furnaces have been made by us since 1899 (thirty-two years) and when better ones can be built "Diener Will Build Them." (With apology to Buick.)

Our thirty-two years experience manufacturing gasoline Blow Torches and Furnaces has taught us *how* to properly and mechanically build these tools.

Valve Needles (one of the most important parts) are made mechanically correct, *of one piece*, thereby overcoming any possibility of points breaking off in valve orifice. Valves of special Torrid burner metal, one piece, no loose seats.

Torch handles or grips are made of steel and when once in place, *always in place*. No loose or wobbly handle grip, as in the cheaper wood grips.

DIENER WIND AND GENERATING SHIELD

(Pat. Oct. 8th, 1929—No. 1,730,648)

The difficulty with all gasoline or kerosene blow torches is to generate (or start) them in cold weather, and particularly in a wind, impossible in a high wind without protecting the torch from this high wind, resulting in an undergenerated or underheated torch, which, therefore, will not burn properly.

Therefore our pre-heating device, so constructed that it serves not only as a wind shield but as a burner itself. The perforations in the sheet steel housing serves as an air mixer, inducing the proper amount of oxygen to the burning wick and high wind intensifying the heat in generating, giving a bunson effect, as well as retaining the heat in burner in use essential in the proper functioning of a blow torch.

Torch tanks are drawn from heavy, deep drawing brass with concave bottom curled in. Tested at 100 pounds pressure. All fittings re-enforced on the inside.

"DIENER" Pumps are placed in tanks, readily removable, *tubes expanded on end* to allow easy replacement of plunger, no danger of cutting leather cup washers.

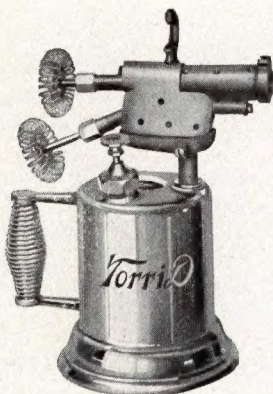
Polishing of shells has been discontinued, as this reduced thickness of shell, had a tendency to harden metal and at times to crack in use. Finished in Bronze Lacquered.

"Torrid" Torches are adjusted to burn the usual grades of gasoline now on the market and *will give* the hottest flame it is possible to obtain with a Blow Torch, 1900 to 2100 degrees.

September, 1930.
Established 1899.
Catalog No. 30.

GEO. W. DIENER MFG. CO.

DUAL NEEDLE VALVE TORCH



No. 250—One Quart, List, Each, \$23.35

FOR GASOLINE OR KEROSENE

No. 250 TORRID torch gives ultra hot flame of tremendous heat and volume (1900 to 2200 degrees), with either *gasoline* or *kerosene*. The scientific and mechanical construction that is inseparable from TORRID torch design is fully expressed in this dual needle valve torch.

Patented DIENER Wind and Generator Shield, making this torch Wind and Weather Proof.

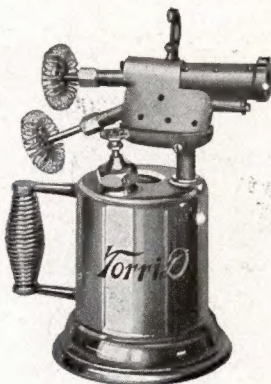
Burner tube and generator cast in one piece of TORRID metal. The lower blunt needle controls the fuel and upper needle cleans the orifice. Either valve may be used to regulate the flame. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. No separate needle blocks or change of parts necessary to burn either gasoline or kerosene. The auxiliary gas chamber below burner tube superheats the vapor. Needles and valves have a large seat so that orifice will not be forced or enlarged.

Steel wire hand grips. *Always Tight.* Steel wire Zero cold proof handles, always cool for operating burner.

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Shipping Weight, Each 5½ Pounds.

DUAL NEEDLE VALVE TORCH



No. 252—One Quart, List, Each, \$19.00

FOR GASOLINE

No. 252 TORRID torch gives ultra hot flame of tremendous heat and volume (1900 to 2200 degrees). The scientific and mechanical construction that is inseparable from TORRID torch design is fully expressed in this dual needle valve torch.

Patented DIENER Wind and Generator Shield, making this torch Wind and Weather Proof.

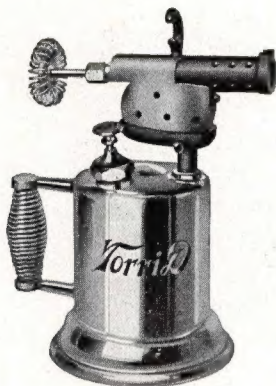
Burner tube and generator cast in one piece of TORRID metal. The lower blunt needle controls the fuel and upper needle cleans the orifice. Either valve may be used to regulate the flame. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. The auxiliary gas chamber below burner tube superheats the vapor. Needles and valves have a large seat so that orifice will not be forced or enlarged.

Steel wire zero cold proof valve handles always cool for operating burner.

Steel wire hand grips, *Always Tight*.

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Shipping Weight, each $5\frac{1}{2}$ Pounds.



No. 77—Quart, List, Each, \$17.00

FOR GASOLINE

No. 77 Torch has a heavy single valve burner, with DIENER Patented Wind and Generator Shield, making this torch Wind and Weather Proof. Gives an extremely hot flame, 1900 to 2200 degrees.

Burner tube and generator cast in one piece of TORRID metal. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. The auxiliary gas chamber below burner tube superheats the vapor. Needles and valve have a large seat so that orifice will not be forced or enlarged.

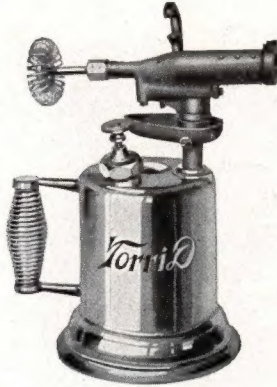
Steel wire zero cold proof valve handles, always cool for operating burner.

Steel wire hand grips—*Always Tight.*

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Economical in fuel consumption.

Shipping Weight, each 5 Pounds.



No. 7—Quart, List, Each, \$15.00

FOR GASOLINE

No. 7 Torch has a heavy single valve burner. Gives an extremely hot flame, 1900 to 2200 degrees.

Burner tube and generator cast in one piece of TORRID metal. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. The auxiliary gas chamber below burner tube superheats the vapor. Needles and valve have a large seat so that orifice will not be forced or enlarged.

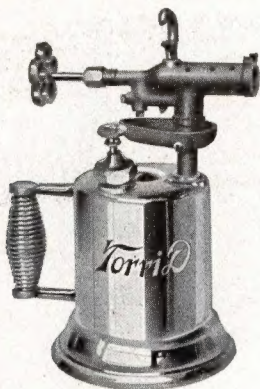
Steel wire zero cold proof valve handles, always cool for operating burner.

Steel wire hand grips—*Always Tight.*

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Economical in fuel consumption.

Shipping Weight, each 5 pounds.



No. 2—One Quart, List, Each, \$11.12

FOR GASOLINE

No. 2 Torch has a heavy single valve burner, a little lighter than our No. 7. Gives an extremely hot flame, 1900 to 2000 degrees.

Burner tube and generator cast in one piece of TORRID metal. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. The auxiliary gas chamber below burner tube superheats the vapor. Needles and valve have a large seat so that orifice will not be forced or enlarged.

Steel wire hand grips—*Always Tight.*

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Economical in fuel consumption.

Shipping Weight, each $4\frac{1}{2}$ pounds.



No. 6—One Pint, List, Each, \$10.50

FOR GASOLINE

No. 6 Torch has a heavy single valve burner. Gives an extremely hot flame, 1900 to 2200 degrees.

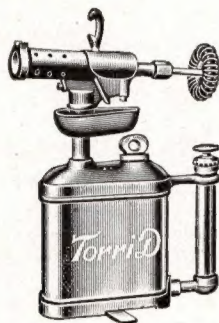
Burner tube and generator cast in one piece of TORRID metal. Valve needles are made of *one piece*, overcoming any possibility of points breaking off in valve orifice. The auxiliary gas chamber below burner tube superheats the vapor. Needle and valve have a large seat so that orifice will not be forced or enlarged.

Steel wire hand grips—*Always Tight.*

DIENER expanded tube automatic pump in tank, accessible, positive, powerful and simple.

Economical in fuel consumption.

Shipping Weight, each 4 pounds.



No. 14—Pint, List, Each, \$15.55

FOR GASOLINE

Flat Tank Torches of exceptional quality. Can be carried in a small, compact space.

SPECIFICATIONS

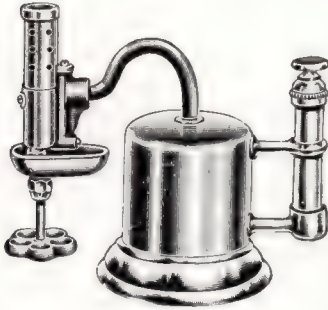
CONSTRUCTION—Bunsen tube and generator cast in one piece of TORRID metal. Heavily veined generator superheats the vaporized gasoline. Oversize drip cup holds enough fuel to generate the torch with one filling. Tank is made of heavy brass. Improved DIENER automatic pump, pump cylinder is expanded at top, for ease of slipping the plunger in without damaging plunger cap. All fittings reinforced on inside of tanks. Nickel plated wire wheel valve handle. Improved DIENER needle valve.

ASSEMBLY—Extra heavy fittings. Perfectly balanced. Handsomely finished. Each torch tested. Fully guaranteed.

PERFORMANCE—Will operate perfectly in any weather, outdoors or inside. Gives a large and steady flame. Powerful blast.

Shipping Weight, each 4 pounds.

NO. 50 LABORATORY TORCH



No. 50—Pint, List, Each, \$15.00

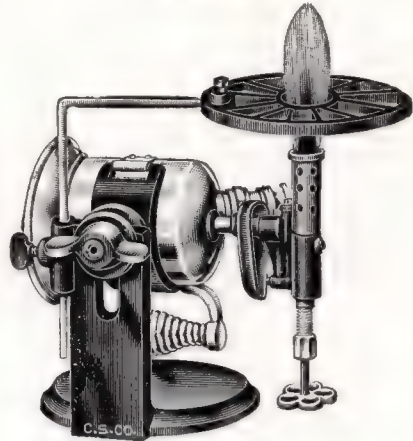
FOR GASOLINE

No. 50 is a torch designed for general laboratory work. It is made with a rigid burner to throw a vertical flame of great intensity which can be regulated to a small pointed flame or a large flaring brush. There are several new features which make this laboratory torch superior to others now on the market. The burner is an improved design and is made of TORRID burner metal. It holds the heat remarkably and the flame is steady, a feature that will be appreciated. The rectangular drip cup makes generating easy and provides safety from overflow. The pump cylinder is expanded at top for ease of slipping the plunger in without damaging the washer. A desirable addition to laboratory instruments.

Shipping Weight, No. 50, Each, 4 Lbs.

NO. 51 LABORATORY TORCH

With Adjustable Stand



No. 51 List Price, Complete,
each \$25.00
Torch only, list price, each . . 15.00
Stand only, list price, each . . . 10.00

FOR GASOLINE

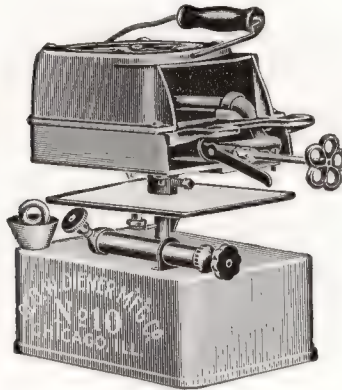
No. 51 is a pint size Laboratory Torch, with same burner as No. 50 but with straight feed tube designed to use in connection with a stand. It can be adjusted in any position the flame is desired.

The Iron Stand is provided with adjustable tripod on which vessels may be placed over the flame. The adjustment is universal and flame of torch can be turned in any direction desired. All nuts, thumb screws and fittings are forged, making great strength.

Shipping Weight, No. 51, Each, 13 Lbs.

TINNERS FURNACES

Square Tank



No. 10—List, Each, \$33.00

FOR GASOLINE

Especially constructed for roofing and gutterwork as the rectangular tank can be set in gutter or on roof without danger of upsetting.

SPECIFICATIONS

CONSTRUCTION—Tank is drawn, seamless, of 20 gauge steel, tinned inside and outside. Has a powerful brass air pump, *cast metal hood* with opening for melting pot. *Is noiseless, odorless and smokeless* in operation, convenient and economical, using 25 to 40 percent less fuel than any other furnace offered for like use now on the market. Has greatest range in heating, namely, 3 to 12 pound coppers, indoors or on a roof, in cold and windy weather.

PERFORMANCE—For Tinnerns, Roofers and Metal Workers' use. Equipped with our cast "horse shoe" burner, burning from each side toward the center, a torrid blue flame in heating contact with one or two coppers, a point of merit all mechanics appreciate. Independent flame for generator, will burn perfectly blue fire and keep generation for any length of time with a very low flame, making it especially adapted to tinnerns and kindred trades.

Capacity of tank, 1 gallon. Height, 12 inches. Weight, 16½ lbs. Weight boxed, 23 lbs.

TINNERS FURNACES

Round Tank



No. 15—List, Each, \$30.00

FOR GASOLINE

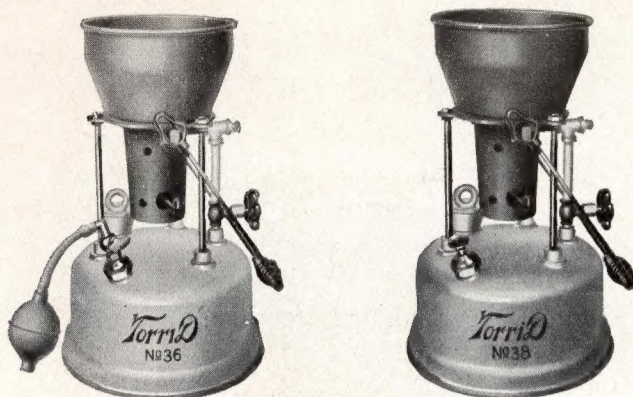
Its popular reputation as the best Tinner's Furnace of this type made is a just tribute to No. 15.

SPECIFICATIONS

CONSTRUCTION—Tank is drawn seamless, of 20 gauge steel, tinned inside and outside. Has a powerful brass air pump, *cast metal hood* with opening for melting pot. *Is noiseless, odorless and smokeless* in operation, convenient and economical, using 25 to 40 per cent less fuel than any other furnace offered for like use now on the market. Has greatest range in heating, namely, 2 to 12 pound coppers, indoors or on a roof, in cold and windy weather.

PERFORMANCE—For Tinner's, Roofers and Metal Workers' use. Equipped with our cast "horse shoe" burner, burning from each side toward the center, giving a torrid blue flame in heating contact with one or two coppers, a point of merit all mechanics will appreciate. While a large volume of blue flame can be produced for heating large coppers or melting pot, this furnace, having an independent flame for generator, will burn a perfectly blue fire and keep generation for any length of time with a very low flame, making it especially adapted to tinner's, sheet metal workers and kindred trades.

Capacity of tank, 1 gallon. Height, 12 inches. Weight, 16½ lbs. Weight boxed, 23 lbs.



No. 36—With Rubber Bulb, List Price, \$20.00

No. 38—With Brass Pump, List Price, \$20.00

FOR GASOLINE

Convenience of the pump assembly is an important feature that appeals to all users of No. 38.

SPECIFICATIONS

CONSTRUCTION—Tank is drawn seamless from 18 gauge steel, lead coated inside and out, and having large funnel opening protected with dust-proof cap on filler plug. All castings are malleable iron or bronze. All fittings heavily reinforced. TORRID coil and burner made of special drawn steel. Coil cup drawn steel. Made to withstand hard usage.

PERFORMANCE—Will give perfect satisfaction on coldest days. Blue flame is steady and of greatest heat. Blast is very powerful. Cold wire handle.

Capacity of Tank, 1 Gallon.

Shipping Weight, 11 Pounds.

GAS SOLDERING FURNACE

| No. | Size | Lining | Shipping weight | List Each |
|-----|------------|------------|-----------------|-----------|
| 1 | One Burner | All Cast | 13 lbs. | \$10.00 |
| 2 | Two Burner | All Cast | 17 lbs. | 13.00 |
| 3 | One Burner | Fire Brick | 15 lbs. | 13.00 |
| 4 | Two Burner | Fire Brick | 20 lbs. | 16.00 |

Practical and economical for natural or illuminating gas. Will heat up to 6-pound coppers. The gas consumption for the double burner Nos. 22 and 24, with both the burners at full blaze, is about 12 feet an hour with ordinary gas pressure, but after the irons have become hot, and if the work is not too heavy, one can reduce the gas consumption by turning down the valves a little or by using only one burner, which consumes just half as much gas.

MELTING POTS

Deep Pattern



| | | | |
|------------------------------|--------|--------|--------|
| Diameter on top, inches..... | 5 | 6 | 8 |
| List price, Each..... | \$1.65 | \$2.00 | \$3.50 |

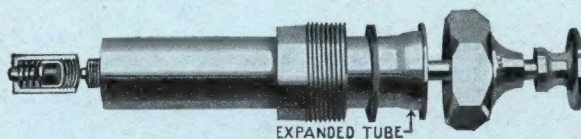
WROUGHT STEEL LADLES



Solid forged, extra deep, with two lips.

| | | | | | | |
|-----------------------|--------|--------|--------|--------|--------|--------|
| Size, Inches..... | 2½ | 3 | 3½ | 4 | 5 | 6 |
| List Price, Each..... | \$1.00 | \$1.20 | \$1.40 | \$1.60 | \$2.50 | \$2.80 |

DIENER EXPANDED END AUTOMATIC PUMP





TORCHES AND FURNACES

